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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,757	09/03/2003	Steven Raymond Lustig	CL2001USNA	3669
23906 7590 03/29/2007 E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON, DE 19805			EXAMINER WASHBURN, DOUGLAS N	
			ART UNIT 2863	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/29/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/653,757

Applicant(s)

LUSTIG ET AL.

Examiner

Douglas N. Washburn

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 69-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 and 77-82 is/are allowed.
- 6) ☒ Claim(s) 69-76 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1 Applicant amendment overcomes objection to drawings and the objection is withdrawn.

The indicated allowability of claims 69-76 is withdrawn in view of the newly discovered references to a first chamber in which each sample is simultaneously exposed to a non-reactive fluid and further, a second chamber, isolated from the first chamber, in which each sample is simultaneously exposed to a reactive fluid. Rejections based on the newly cited references follow.

The amendment in regard to claims 69 and 73 fails to comply with 37 CFR 1.121 (c).

Drawings

2 The replacement drawings were received on 25 January 2007. These drawings are acceptable.

Claim Rejections - 35 USC § 102

3 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 69-76 are rejected under 35 U.S.C. 102(e) as being anticipated by Paterson et al.(US 6,962,644) (Hereafter referred to as Paterson).

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Paterson teaches:

Regarding claim 69, an apparatus (tandem chamber-type etch system; column 2, lines 58 and 59; figure 1, element 100) for testing a plurality of samples (process multiple wafers; column 2, lines 52 and 53), comprising (a) a first chamber (processing region 202) in which each sample is simultaneously exposed to a non-reactive fluid (Ar (argon); column 11, line 13), (b) a second chamber (processing region 203), isolated from the first chamber (interior wall 206 is shared between the respective first and second tandem process chambers 200, 201 and isolates the processing environment of the processing regions 202, 203 from each other; column 4, lines 39-43), in which each sample is simultaneously exposed to a reactive fluid (O₂ (oxygen); column 11, line 13), and (c) an analyzer (process controller; column 4, line 7; figure 2, element 223).

Regarding claim 70, an analyzer performs optical analysis (optical signals may be processed by the process analysis system 289; column 5, lines 22 and 23).

Regarding claim 71, an analyzer performs a method of analysis selected from the group consisting of ultrasonic, electrostatic, magnetic, radio frequency (plasma may be generated by application of RF power; column 11, lines 5 and 6; plasma process may be monitored by the process analysis system 289; column 11, lines 56 and 57) or x-ray analysis.

Regarding claim 72a fluid distribution system is isolated from the analyzer (gas distribution assembly 216 including a showerhead 222 configured to dispense a gas into the respective processing regions 202, 203; column 4, lines 50-52; figure 2, element 223 and figure 4A, elements 216 and 222).

Regarding claim 73, an apparatus (tandem chamber-type etch system; column 2, lines 58 and 59; figure 1, element 100) for testing a plurality of samples (process multiple wafers; column 2, lines 52 and 53), comprising (a) a first chamber (processing region 202) in which each sample is simultaneously brought to a pre-determined temperature (to provide thermal control to the upper electrode assembly 218, cooling channels 294 for the first and second upper electrode assemblies 218A and 218B may be coupled to an external coolant source (not shown) by a first and second coolant input 291 and 293, respectively; column 8, lines 50-54), (b) a second chamber (processing region 203), isolated from the first chamber (interior wall 206 is shared between the respective first and second tandem process chambers 200, 201 and isolates the processing environment of the processing regions 202, 203 from each other; column 4, lines 39-43), in which each sample is simultaneously exposed to a reactive fluid (O_2 (oxygen); column 11, line 13), and (c) an analyzer (process controller; column 4, line 7; figure 2, element 223).

Regarding claim 74, an analyzer performs optical analysis (optical signals may be processed by the process analysis system 289; column 5, lines 22 and 23).

Regarding claim 75, an analyzer performs a method of analysis selected from the group consisting of ultrasonic, electrostatic, magnetic, radio frequency (plasma may be generated by application of RF power; column 11, lines 5 and 6; plasma process may be monitored by the process analysis system 289; column 11, lines 56 and 57) or x-ray analysis.

Regarding claim 76, a fluid distribution system that is isolated from the analyzer (gas distribution assembly 216 including a showerhead 222 configured to dispense a gas into the respective processing regions 202, 203; column 4, lines 50-52; figure 2, element 223 and figure 4A, elements 216 and 222).

Allowable Subject Matter

4 Claims 1-10 and 77-82 are allowed.

Reasons for indicating allowable subject matter were disclosed in office action mailed 1 December 2005.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas N. Washburn whose telephone number is (571) 272-2284. The examiner can normally be reached on Monday through Thursday 6:30 AM - 4:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DNW


John Barlow
Supervisory Patent Examiner
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